



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 28 2011

US EPA RECORDS CENTER REGION 5



409776

**MEMORANDUM**

REPLY TO THE ATTENTION OF:

**DATE:**

**SUBJECT:** Enforcement Action Memorandum – Determination of Threat to Public Health and or the Environment at the Lindsay Light II Site/515 North Peshtigo, Chicago, Cook County, Illinois (Site Spill ID # YT, OU 18)

**FROM:** Verneta Simon, On-Scene Coordinator *VS*  
Emergency Response Branch II – Removal Section 4

**THRU:** Linda C. Nachowicz, Chief *MWR for L*  
Emergency Response Branch II

**TO:** Richard C. Karl, Director  
Superfund Division

**I. PURPOSE**

The purpose of this Enforcement Action Memorandum is to document the determination of an imminent and substantial threat to public health and the environment posed by the existence of thorium-impacted soils at Lindsay Light II (“Lindsay Light”) Operable Unit (“OU”) 18, 515 North Peshtigo Site (“Site”). The Site is approximately 0.9 acres and is located in an area known as “Streeterville” that, beginning in 1993, has been the subject of several removal actions to remove radioactive thorium waste. To date, U.S. EPA has not initiated any response actions using the On-scene Coordinator \$50,000/\$250,000 delegation and warrant authority.

**II. SITE CONDITIONS AND BACKGROUND**

**CERCLIS #** ILD 0000002212

**A. Site Description**

**1. Removal site evaluation**

Related BIT 500 Lakeshore Owner, LLC (“Related BIT”), the present property owner began to remove the asphalt from the property on or about August 22, 2011 to begin ground work to construct a high rise building on the property. Changes in subsurface gamma levels detected during radiation surveillance at the Site suggested the

presence of buried thorium contamination. The removal of asphalt and subsequent construction activities exposed suspected subsurface radioactive contamination thereby creating a potential release of a hazardous substance that may present an imminent and substantial endangerment to human health and the environment. This property is directly across the street from the Lindsay Light Operable Unit 10 (aka former Kraft site) from which over 200 tons of thorium contaminated materials were removed during that property's development.

## **2. Physical location**

This Site is located at 515 North Peshtigo, Chicago, Cook County, Illinois (Figure A-1). The Site is less than one acre, approximately 0.9 acres. The geographical coordinates for the Site are Latitude 41° 49' 41.4984" North and Longitude -87° 43' 27.8106" West. Immediately surrounding this Site are properties where U.S. EPA previously identified thorium contaminated soils above the 7.1 pCi/g clean-up level and required remediation. Figure A-2, the City of Chicago Streeterville Thorium Map, identifies the properties that U.S. EPA has evaluated and/or remediated since 1993. This Site is located one city block East of Lindsay Light II, 316 East Illinois Street, where the Lindsay Light Company ("Lindsay Light") refined monazite ore to produce thorium nitrate and manufacture thorium-impregnated gas mantles.

An Environmental Justice (EJ) analysis was performed. The analysis is contained in Attachment 2. The area surrounding the Lindsay Light II Site/OU18 515 Peshtigo was screened using Region V's EJ Assist Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Census tracts with a score of 1, 2, or 3 are considered to be high-priority potential EJ areas of concern according to U.S. EPA Region V. The Lindsay Light II Site is in a census tract with a score of 1 (Attachment 1). Upon closer analysis, within 1 mile of the Site, the demographics are as follows: the population is 23.3 % minority and 8.1% of the population is living below the poverty level. Therefore, Region 5 does not consider the Site to be high-priority potential EJ area of concern.

## **3. Site Characteristics**

This property was most recently used as a commercial parking lot. According to a Phase I Environmental Site Assessment Report, dated September 30, 1993, historic uses of the property included a gas station, a lumberyard and railroad spur. In addition, this property is immediately west of the Lindsay Light II Site / OU 10 (AKA Kraft property).

## **4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant**

The radiological survey conducted by AECOM, Related BIT's environmental consultant, demonstrated the presence of elevated gamma while pot-holding for caissons on August 29, 2011. In addition, the highest elevated material was sent to an off-site laboratory, RSSI, on September 1, 2011, which showed thorium contaminated soils

present at 76 picoCuries per gram (pCi/g). The Streeterville clean-up criterion is 7.1 pCi/g. Copies of pertinent surveys, e-mail messages and analytical reports are contained in the Administrative Record.

## **5. NPL status**

This Site is not on the National Priorities List (NPL).

## **B. Other Actions to Date**

### **1. Previous actions**

As mentioned earlier, U.S. EPA has been assessing the radiological contamination in the Streeterville area of Chicago since approximately 1993.

### **2. Current actions**

In preparation of the upcoming construction at 515 North Peshtigo, Related BIT performed geotechnical borings, test pits, and other activities.

## **C. State and Local Authorities' Roles**

### **1. State and local actions to date**

In 1999, the City of Chicago through the Department of Environment established Right-of-Way permit procedures to ensure radiological screening before and during work exposing or intruding into subsurface soils in Streeterville rights-of-ways. A description of the procedures and a map<sup>1</sup> of the Streeterville Thorium Investigation area are available on the City of Chicago's website. The map is also attached to this Memorandum as Figure A-2.

The State of Illinois's role is described below in Section C.2.

### **2. Potential for continued State/Local response**

Since 1993, U.S. EPA has led CERCLA response activities for Lindsay Light-related thorium contamination in Streeterville. In 1993, the Illinois Department of Nuclear Safety (now known as the Illinois Emergency Management Agency, Division of Nuclear Safety (IEMA) participated in a joint building survey with U.S. EPA and the Agency for Toxic Substances and Disease Registry (ATSDR), but because Lindsay Light was not a licensed radioactive materials facility, IEMA has had very limited involvement.

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<sup>1</sup> Please note the map of the Streeterville Thorium Investigation Area is dated June 15, 2010. Since that date, known contamination has been removed from 211 East Grand and thorium contamination has been identified at 515 North Peshtigo.

### **III. THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

Conditions at the Site may pose an imminent and substantial endangerment to public health or welfare or the environment, based upon factors set forth in the National Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Section 300.415 (b)(2). These conditions include:

#### **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;**

Given our extensive experience in Streeterville, the proximity of this site to other Lindsay Light impacted properties, the latest sample and gamma results, it has been demonstrated that thorium-contaminated soils related to the Lindsay Light Company are present at this Site. Thorium-232 has a half-life of 14 billion years and decays by alpha emission, with accompanying gamma radiation, Thorium-232 is the top of a long decay series that contains key radionuclides such as radium-228, its direct decay product, and radon-220. According to the ATSDR's Toxicological Frequently Asked Questions, also known as ToxFAQs™ for Thorium, studies on thorium workers have shown that breathing high levels of thorium dust results in an increased chance of getting lung disease. Furthermore, workers who had high exposure to cigarette smoke, radon gas, and thorium had cancers of the lung, pancreas and blood. A copy of the entire ATSDR ToxFAQs™ for Thorium is available in Attachment II. Given Related BIT's mobilization of construction equipment to the Site, a potential exposure threat exists. U.S. EPA and Related BIT executed an Administrative Settlement Agreement on Consent (ASAOC) that requires Related BIT to excavate and remediate thorium-contaminated soils they encounter above the 7.1pCi/g clean-up level. This ASAOC was executed on September 2, 2011.

#### **High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate;**

Given the elevated gamma measurements detected on August 29 and August 31, 2011, and the RSSI analytical soil result of 76 pCi/g, if proper measures to identify and control radiological contamination are not implemented, thorium contaminated wastes may be released during construction work.

#### **Other situations or factors which may pose threats to public health or welfare or the environment;**

Beginning in approximately 1904, the Lindsay Light Company (Lindsay) manufactured gas lights and gas mantles for residential and commercial use, at several locations in the Streeterville neighborhood of Chicago. The historic record regarding Lindsay's volume of thorium production in Streeterville is

uncertain. According to a U.S. Tariff Commission document on the Incandescent Gas-Mantle Industry published in 1920, in 1914 Lindsay expanded its thorium manufacturing capacity in Chicago to meet the increased domestic and foreign demand caused by the outbreak of war in Europe. The production of thorium for the gas light mantles resulted in a sandy waste known as mill tailings that was often used as fill material. The November 1935, Lindsay Board of Directors' Meeting minutes discussed plans to move Lindsay's Streeterville operations to the City of West Chicago by September 1936. The West Chicago facility became known as the Rare Earths Facility or REF. In West Chicago, Lindsay and its successors continued to produce thorium as well as other radioactive materials for commercial and defense-related purposes. The REF eventually became subject to a federal and then a state of Illinois radioactive materials license. As a result of Lindsay's Rare Earths Facility thorium manufacturing and disposal activities, four West Chicago areas were listed on the National Priorities List of Superfund Sites.

In the West Chicago area, U.S. EPA, with the assistance of IEMA, has overseen the clean-up of over 670 properties in residential areas, a 100-acre public park, a sewage treatment plant, and the clean-up of over six miles of creek and river in DuPage County. The widespread use and dispersal of the thorium material as fill in West Chicago likely reflects a similar widespread dispersal of the Lindsay Light thorium residuals in Chicago. Unlike the relatively open areas in the City of West Chicago where the extensive nature of the thorium contamination was relatively easy to identify, most of the Lindsay Light thorium was shielded from detection by asphalt, sidewalks, streets, and buildings. Consequently, appropriate response actions are necessary to assure construction activities will not result in the uncontrolled exposure to or release of thorium contamination or improper disposal of the thorium-contaminated soils at or from the Site.

**The availability of other appropriate federal or state response mechanisms to respond to the release;**

As described in Section II and the Administrative Record, to date U.S. EPA has taken the lead in dealing with Lindsay Light-related thorium contamination in Streeterville.

**IV. ENDANGERMENT DETERMINATION**

Given the Site conditions, the nature of the contaminants, radioactive materials that cause external exposure, inhalation, ingestion, and direct contact hazards, as described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

## **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

### **A. Proposed Actions:**

#### **1. Proposed Action Description:**

PRP activities at this Site will include, but are not limited to, radiation monitoring, excavation and proper disposal of contaminated soils while constructing a 57-story building. This high-rise residential building is predominantly slab on grade, but there will be elevator pit(s), grade beams, subsurface infrastructure, utilities, etc. that will require excavation of urban fill material. At the center of the property, beneath the tower, shoring will be installed in approximately a 30 x 30 foot area in order to excavate to a depth of about 20 feet below grade. This excavation beneath the core will extend approximately 10-feet into native soils.

#### **2. Contribution to Remedial Performance:**

The proposed action will not impede future responses based upon available information.

#### **3. Applicable or Relevant and Appropriate Requirements (ARARs)**

All applicable or relevant and appropriate requirements (ARARs) will be complied with to the extent practicable. The primary federal Applicable or Relevant and Appropriate Regulation for radioactive soil cleanup criteria is Title 40, Part 192 of the Code of Federal Regulations, "Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings." Ancillary ARARs include the Nuclear Regulatory Commission's (NRC) Title 10, Part 20, of the Code of Federal Regulations, "Standards for Protection Against Radiation," NRC Regulatory Guide 1.86, "Termination of Operating License for Nuclear Reactors," and the Department of Transportation's Title 49 for shipping hazardous materials. Relevant EPA guidance includes OSWER Directive No. 9200.4-25, issued February 12, 1998, regarding the "Use of Soil Cleanup Criteria in 40 CFR Part 192, as Remediation Goals for CERCLA Site."

Many of the regulations carried out by the NRC have been delegated to the Illinois Emergency Management Agency, Division of Nuclear Safety. The State has previously identified the regulations at 32 Ill. Administrative Code 332, Licensing Requirements for Source Material Milling Facilities which contain the licensing requirements for source material milling facilities in Illinois as relevant and appropriate to the cleanup of thorium in Streeterville. The cleanup standard for soils and sediment at the Site derived from the foregoing federal and state regulations is 7.1 pCi/g combined radium.

U.S. EPA will also implement the principle of ALARA (As Low As Reasonably Achievable) which refers to the cleanup of all materials above the cleanup standard, to the extent practicable. ALARA is described in DOE and NRC orders and regulations and

in U.S. EPA regulations at 40 CFR § 192.22. U.S. EPA made the decision to achieve ALARA in an attempt to maximize protection of human health.

**4. Project Schedule:**

Not applicable

**B. Estimated Costs:**

Not available, since this is an Enforcement Action Memorandum.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the facility which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

**VI. CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Delayed or non-action may result in increased likelihood of external exposure, inhalation, ingestion or direct contact to human populations accessing and working on the site. Also, since there is no threshold for radiological risk, additional exposure to radiological materials will increase the cancer risk.

**VII. OUTSTANDING POLICY ISSUES**

None.

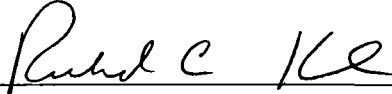
**VIII. ENFORCEMENT**

For Administrative purposes, information concerning confidential enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Lindsay Light II Site/515 North Peshtigo, Chicago, Illinois, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for this Site (Attachment 3). Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal action and I recommend your approval of the proposed removal action. You may indicate your decision by signing below.

APPROVE:

 9-23-11  
Director, Superfund Division Date

DISAPPROVE:

\_\_\_\_\_  
Director, Superfund Division Date

### Enforcement Confidential Addendum

#### Figures:

- A-1 Pioneer Engineering & Environmental Services Site Diagram
- A-2 City of Chicago Streeterville Thorium Map dated June 15, 2011

#### Attachments

- 1. Environmental Justice Map
- 2. ATSDR ToxFAQs™ for Thorium
- 3. Index to the Administrative Record

cc: S. Fielding, EPA, 5203-G  
M. Chezick, U.S. Department of Interior, w/o Enf. Addendum  
D. Scott, Illinois Environmental Protection Agency, w/o Enf. Addendum  
S. Davis, Illinois Department of Natural Resources, w/o Enf. Addendum  
B. Everetts, Illinois Environmental Protection Agency, w/o Enf. Addendum  
G. McCandless, Illinois Emergency Management Agency, w/o Enf. Addendum  
K. Worthington, Chicago Department of Environment, w/o Enf. Addendum  
B. Haller, Chicago Department of Planning and Development, w/o Enf. Addendum

**BCC PAGE**

**(REDACTED 1 PAGE)**

**ENFORCEMENT CONFIDENTIAL**

**ENFORCEMENT ADDENDUM  
LINDSAY LIGHT II SITE  
OU 18, 515 NORTH PESHTIGO (SSID 05YT)  
CHICAGO, ILLINOIS**

**AUGUST 2011**

**(REDACTED 2 PAGES)**

### **Figures**

- A-1 Pioneer Engineering & Environmental Services Site Diagram
- A-2 City of Chicago Streeterville Thorium Map dated June 15, 2011

North

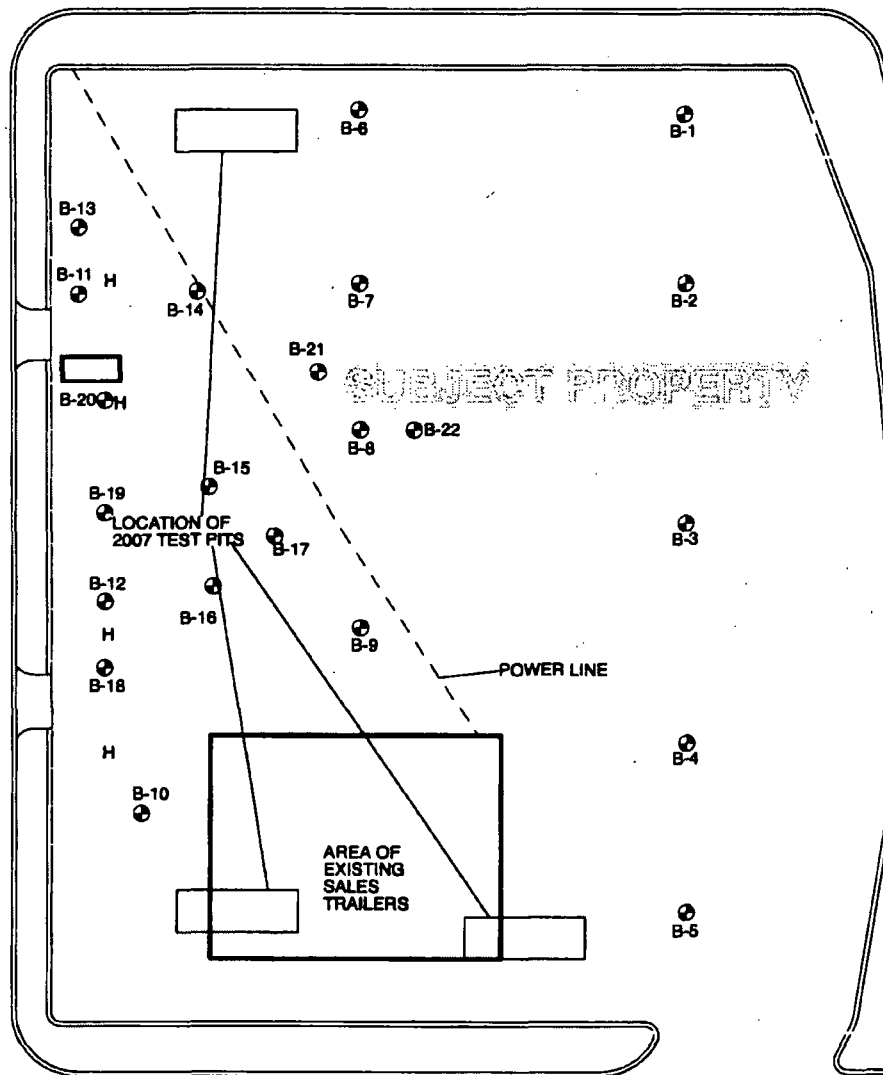


EAST GRAND AVENUE

NORTH PESHTIGO COURT

NORTH LAKE SHORE DRIVE

EAST ILLINOIS STREET



**PIONEER**  
Engineering & Environmental Services, Inc.

Legend:  
Approximate Property Line  
H=Handicapped Parking  
⊙ Soil Boring Location

Scale: 1"=40'  
0' 40'  
Drawn by: Jackson Toomey  
Job No.: 07-1550-103

Date: December 2008  
Checked by: Joe Kelly

**Exhibit A**  
**Site Map**  
**515 N. Peshtigo Court**  
**Chicago, IL**

# Streeterville Thorium Investigation



S:\BRN\_FLDS\Streeterville Thorium\Aerial Map

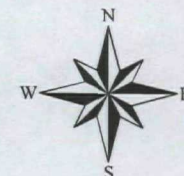
Area Boundaries are approximate

Copyright © 2006 City of Chicago



City of Chicago  
 Richard M. Daley  
 Mayor

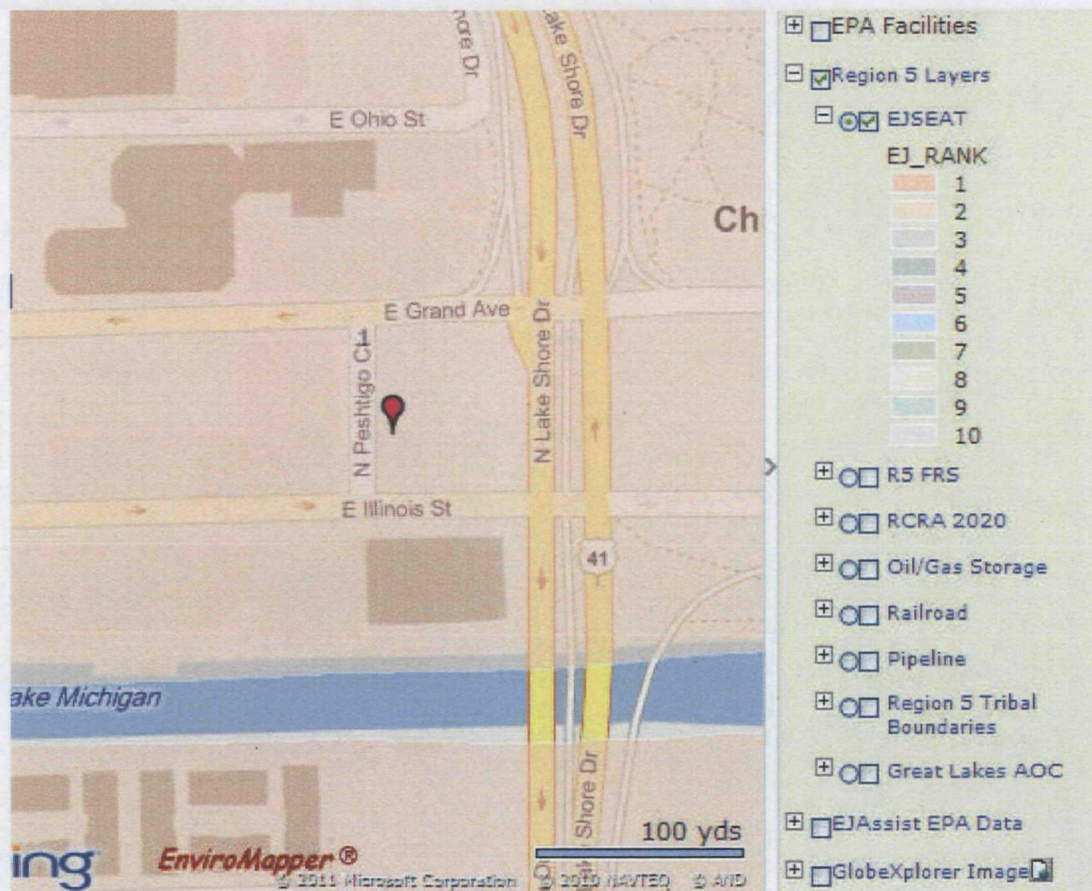
Department of  
 Environment  
 Suzanne Malec-McKenna  
 Commissioner



## Attachment 1

### **Superfund EJ Analysis for the Lindsay Light II OU18 Site**

Lindsay Light Site Map Showing EJ SEAT Values For Surrounding Area



**Attachment 2**

ATSDR ToxFAQs™ for Thorium



Agency for Toxic Substances &amp; Disease Registry

## ToxFAQs™ for Thorium

*(Torio)*

July 1999

CAS# 7440-29-1

**PDF Version, 120 KB**

**This fact sheet answers the most frequently asked health questions about thorium. For more information, you may call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.**

**HIGHLIGHTS:** Thorium is a radioactive substance that occurs naturally in the environment. It has been shown to cause an increase in cancers of the lung, pancreas, and blood in workers exposed to high levels of it in the air. This chemical has been found in at least 16 of the 1,177 National Priorities List sites identified by the Environmental Protection Agency (EPA).

**What is thorium?**

Thorium is a naturally occurring, radioactive substance. In the environment, thorium exists in combination with other minerals, such as silica. Small amounts of thorium are present in all rocks, soil, water, plants, and animals. Soil contains an average of about 6 parts of thorium per million parts of soil (6 ppm).

More than 99% of natural thorium exists in the form of thorium-232. It breaks down into two parts—a small part called "alpha" radiation and a large part called the decay product. The decay product is also not stable and continues to break down through a series of decay products until a stable product is formed. During these decay processes, radioactive substances are produced. These include radium and radon. These substances give off radiation, including alpha and beta particles, and gamma radiation.

Some rocks in underground mines contain thorium in a more concentrated form. After these rocks are mined, thorium is usually concentrated and changed into thorium dioxide or other chemical forms. After most of the thorium is removed, the rocks are called "depleted" ore or tailings.

Thorium is used to make ceramics, gas lantern mantles, and metals used in the aerospace industry and in nuclear reactions. Thorium can also be used as a fuel for generating nuclear energy.

**What happens to thorium when it enters the environment?**

- Thorium is a natural part of the environment.
- Thorium changes extremely slowly into other radioactive substances.
- It takes about 14 billion years for half of the thorium-232 to change into new forms.
- As rocks are broken up by wind and water, the thorium and all other components of the rocks become part of the soil.
- Thorium in soil can be washed into rivers and lakes.
- Windblown dust and volcanic eruptions are natural sources of thorium in the air.

- Burning coal may release small amounts of thorium into the air.
  - Mining thorium or making products that contain it may also release thorium into the environment.
- 

### **How might I be exposed to thorium?**

- Just by being alive, everyone is exposed to small amounts of thorium in air, water, and food.
  - Breathing air near facilities where uranium, phosphate, or tin ore is processed.
  - Living in homes built on soil with high levels of thorium.
  - Working in the uranium, thorium, tin, and phosphate mining, and gas mantle production industries may expose you to higher levels of thorium.
  - Living near radioactive waste disposal sites.
- 

### **How can thorium affect my health?**

Studies on thorium workers have shown that breathing high levels of thorium dust results in an increased chance of getting lung disease. Liver diseases and effects on the blood were found in people injected with thorotrast, a thorium compound injected into the body as a radiographic contrast medium between the years 1928 and 1955. Animal studies have shown that breathing thorium may result in lung damage.

Studies on exposed human populations have not reported any birth defects or effects on a person's ability to have children.

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### **How likely is thorium to cause cancer?**

Workers who had high exposures to cigarette smoke, radon gas, and thorium had cancers of the lung, pancreas, and blood. People who had large amounts of thorium injected into their blood for special x-ray tests had more than the usual number of liver tumors, cancers of the blood, such as leukemia, and tumors of the bone, kidney, spleen, and pancreas.

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### **Is there a medical test to show whether I've been exposed to thorium?**

Special tests that measure the level of radioactivity from thorium in your urine and feces, and radon gas in the air you exhale can determine if you have been exposed to thorium. These tests are only useful if done within several days to a week after exposure. The tests cannot tell you if your health will be affected by the exposure. They require special equipment and are probably not available at your local clinic or hospital.

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### **Has the federal government made recommendations to protect human health?**

The EPA has set a drinking water limit of 15 picocuries per liter (15 pCi/L) of water for gross alpha particle activity and 4 millirems per year for beta particles and photon activity (for example, gamma radiation and x-rays).

The federal recommendations have been updated as of July 1999.

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### **Glossary**

CAS: Chemical Abstracts Service.

National Priorities List: A list of the nation's worst hazardous waste sites.

Millirem (mrem): A unit used to measure radiation dose.

Picocurie (pCi): A unit used to measure the intensity of radiation.

ppm: Parts per million.

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## References

Agency for Toxic Substances and Disease Registry (ATSDR). 1990. Toxicological Profile for thorium. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

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## Where can I get more information?

If you have questions or concerns, please contact your community or state health or environmental quality department or:

### For more information, contact:

Agency for Toxic Substances and Disease Registry  
Division of Toxicology and Environmental Medicine  
1600 Clifton Road NE, Mailstop F-62  
Atlanta, GA 30333  
Phone: 1-800-CDC-INFO · 888-232-6348 (TTY)  
Fax: 1-770-488-4178  
Email: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

ATSDR can also tell you the location of occupational and environmental health clinics. These clinics specialize in recognizing, evaluating, and treating illnesses resulting from exposure to hazardous substances.

### Information line and technical assistance:

Phone: 888-422-8737  
FAX: (770)-488-4178

### To order toxicological profiles, contact:

National Technical Information Service  
5285 Port Royal Road  
Springfield, VA 22161  
Phone: 800-553-6847 or 703-605-6000

## Disclaimer

All ATSDR Toxicological Profile, Public Health Statement and ToxFAQs PDF files are electronic conversions from paper copy or other electronic ASCII text files. This conversion may have resulted in character translation or format errors. Users are referred to the original paper copy of the toxicological profile for the official text, figures, and tables. Original paper copies can be obtained via the directions on the [toxicological profile home page](#), which also contains other important information about the profiles.

- Page last reviewed: March 3, 2011
- Page last updated: March 3, 2011
- Content source: [Agency for Toxic Substances and Disease Registry](#)

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Agency for Toxic Substances and Disease Registry, 4770 Buford Hwy NE,  
Atlanta, GA 30341  
Contact CDC: 800-232-4636 / TTY: 888-232-6348



### ATTACHMENT 3

#### U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

#### ADMINISTRATIVE RECORD FOR LINDSAY LIGHT II SITE OPERABLE UNIT #18: 515 N. PESHTIGO COURT CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL  
SEPTEMBER 16, 2011

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	12/20/94	Newzin, S., STS Consultants	Simon, V., U.S. EPA	FAX Transmission re: Certification for the Waste Water at Lindsay Light II Site w/ Attach- ments	4
2	08/25/95	Thompson, R., Kerr-McGee Chemical Corporation	Klinger, J., IDNS	Letter re: Classification of Radioactive Material at Lindsay Light II w/ Attach- ments	20
3	10/25/95	Klinger, J., IDNS	Thompson, R., Kerr-McGee Chemical Corporation	Letter re: Classification of Radioactive Material at Lindsay Light II	1
4	06/04/96	Allen, R., IDNS	Simon, V., U.S. EPA	Letter re: Identification of ARARs for the Lindsay Light II Site w/ Attach- ments	21
5	1994-2011	U.S. EPA	Public	Administrative Record for Lindsay Light II (Original and Updates #1-11) (DOC- MENTS CONTAINED ON THE INDEX ARE INCORPORATED BY REFERENCE INTO THE THE ADMINISTRATIVE RECORD FOR OPERABLE UNIT #18)	15
6	09/30/03	McCance, S. & S. Bunsen, URS Corporation	Westwacker P-24, LLC c/o P. Sharkey, Mayer, Brown, Rowe & Maw	Letter re: Letter Report Update of Phase I Environ- mental Site Assessment of Parcel 24	15
7	00/00/06	City of Chicago/ Department of Environment	File	Map: Streeterville Thorium Investigation	1
8	12/00/08	Pioneer Engineering & Environment, Inc.	File	Drawing: Site Map for 515 N. Peshtigo Court	1

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
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10	08/29/11	Kornder, S., AECOM	Fulghum, M., U.S. EPA	E-Mail Transmission re: Update on Start of Field Activities at 515 N. Peshtigo Court w/ Attached Drilled Pier Plan Drawing	4
11	08/31/11	Kornder, S., AECOM	Fulghum, M., U.S. EPA	Letter re: Update on Field Activities at 515 N. Peshtigo Court w/ Attached E-Mail Transmission History and Drilled Pier Plan Drawing	4
12	09/02/11	Karl, R., U.S. EPA	Related BIT 500 LLC, c/o L. Dombrowski, Wildman, Harrold, Allen & Dixon, LLP	Administrative Settlement Agreement and Order on Consent for Removal Action w/ Cover Letter for Lindsay Light II Operable Unit 515 N. Peshtigo Court	39
13	09/07/11	Kornder, S., AECOM	Simon, V., U.S. EPA	E-Mail Transmission For- warding Attached Gamma Spec Results for 515 N. Peshtigo Court	8
14	09/07/11	Simon, V., U.S. EPA	Kornder, S., AECOM	E-Mail Transmission re: Options for Radiological Disposal at the Lindsay Light II Site w/ Reply History and Four Attach- ments	48
15	09/15/11	Kornder, S., AECOM	Simon, V., U.S. EPA	E-Mail Transmission re: TCLP Lead Results for 515 Peshtigo Court w/ Attached July 15, 1997 Summary of Phase II Field Investigation of Parcel 24 Parking Area	9
16	00/00/00	Simon, V., U.S. EPA	Karl, R., U.S. EPA	Enforcement Action Memo- randum: Determination of Threat to Public Health and or the Environment at the Lindsay Light II Site/515 North Peshtigo, Chicago, Cook County, Illinois <b>(PENDING)</b>	